

REMARKS

Applicants acknowledge that this application is currently under final rejection. Accordingly, a Request for Continued Examination has been submitted, together with the appropriate fee. Applicants therefore request that further examination of this application proceed on the basis of the enclosed amendment.

In response to the objection to Claim 3, Applicants have amended it to depend from Claim 1, as suggested.

Claims 1, 3, 10 and 11 (all claims currently of record) have been rejected under 35 U.S.C. §103(a) as unpatentable over Zepp et al (U.S. Patent No. 6,880,229) in view of Abukawa et al and further in view of Umeda et al (U.S. Patent No. 6,124,660). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims of record in this application distinguish over the cited references, whether considered separately or in combination.

The present invention is directed to an epicycloidal motor which has a stator core that is formed by a combination of multiple split core pieces, with a stator winding conductor being wound in slots of the stator core. The split core pieces are provided in the form of a tee which includes a tee base, a tee column extending radially from the tee base, and a tee flange which extends in a circumferential direction on both sides of a tip of the tee column.

One objective of the present invention is to provide an epicycloidal motor that has an optimum stator core shape in order to increase the lamination factor of a winding coil and to decrease flux loss of the winding coil. This objective is achieved by means of the split core piece design in which the core pieces are formed in the shape of tees, the base of such tee being connected with a common cylindrical housing.

The newly cited Zepp et al reference discloses an electrical machine which uses a plurality of separate tees that can be axially inserted into a stator ring or the armature after receiving a bobbin or form one wound coil. However, in Zepp et al, the tee in core back are split into respective separate magnetic bodies. With such an arrangement comprising a plurality of split portions, the iron losses in the system are increased. Moreover, Zepp et al also does not teach or suggest an optimum stator core shape to minimize cogging torque.


In the Abukawa et al reference, on the other hand, the winding coil is inserted from a slot opening, and the lamination factor of the winding coil is limited by the predetermined slot opening. Accordingly, Applicants respectfully submit that a combination of Zepp et al, Abukawa et al and Umeda et al, which is discussed in the previous amendment) does not result in the present invention as recited in Claim 1. In particular, these references do not disclose a stator core in which the base portion of each core piece of the stator is connected with a cylindrical housing, as recited in Claim 1. Accordingly, Applicants respectfully

submit that the claims as amended herein distinguish over Zepp et al, Abukawa et al and Umeda et al.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #056207.52601US).

Respectfully submitted,



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